

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1. (Currently amended) A method ~~of predicting problematic dialogs in a task classification system that operates on a task objective of a user~~, comprising:

determining whether a task classification decision can be made based on a user's input communication, wherein if the task classification decision cannot be made, the method comprises:

determining whether a probability of conducting a successful dialog with the user exceeds a first threshold, a successful dialog being a dialog exchange between an automated dialog system and the user that results in ~~at least one of~~ processing of the user's an input communication of the user ~~and routing the user's input communication to a stage consistent with the user's intent~~, wherein if the first threshold is exceeded, further dialog is conducted with the user, and

wherein the probability is determined using dialog training data stored in a dialog training database, the dialog training data including at least one of dialog classification models and extracted dialog features.

2. (Original) The method of claim 1, wherein if the first threshold is not exceeded, the user is routed to a human for assistance.

3. (Original) The method of claim 1, further comprising:

determining whether a probability of conducting a successful dialog with the user exceeds a second threshold, the second threshold being greater than the first threshold, wherein if the second threshold is exceeded, further dialog is conducted with the user using a current dialog strategy.

4. (Original) The method of claim 3, wherein if the second threshold is not exceeded, further dialog is conducted with the user using an adapted dialog strategy.
5. (Original) The method of claim 4, wherein the adapted dialog strategy includes one of prompting the user with choices and prompting the user to confirm the recognition and understanding data.
6. (Original) The method of claim 1, wherein the user's input communication includes at least of verbal and nonverbal communications.
7. (Original) The method of claim 6, wherein the nonverbal communications include at least one of gestures, body movements, head movements, non-responses, text, keyboard entries, keypad entries, mouse clicks, DTMF codes, pointers, stylus, cable set-top box entries, graphical user interface entries, and touchscreen entries.
8. (Original) The method of claim 1, wherein the method is used for customer care purposes.
9. (Original) The method of claim 1, wherein the probability is determined using recognition and understanding data derived from the user's input communication.
10. (Canceled)
11. (Original) The method of claim 10, wherein the extracted dialog features are derived from recognition, understanding and dialog data.
12. (Currently amended) ~~The method of claim 1, further comprising:~~
A method comprising:
determining whether a task classification decision can be made based on a user's first input communication, wherein if the task classification decision cannot be made, the method comprises:

for the first input communication, determining whether a probability of conducting a successful dialog with the user exceeds a first threshold, a successful dialog being a dialog exchange between an automated dialog system and the user that results in processing of an input communication of the user to a stage consistent with the user's intent;

if the first threshold is exceeded, storing a first dialog exchange in a dialog history database, wherein the first dialog exchange includes a first automated dialog output and ~~a first user's~~ the first input communication of the user and the further dialog conducted with the user results in a second dialog exchange, wherein the second dialog exchange includes a second dialog output and a second ~~user's~~ input communication of the user;

and

determining whether the probability of conducting a successful dialog with the user exceeds the first threshold using the first dialog exchange and the second dialog exchange.

13. (Canceled)

14. (Original) The method of claim 1, wherein if the task classification decision can be made, the task is classified as one of a set of task objectives and the user's input communication is routed in accordance with the classified task objected.

15. (Currently amended) The method of claim 14, further comprising:

~~receiving the user's input communication;~~

~~recognizing portions of the user's input communication; and~~

providing an input to the task classification decision based on applying a confidence function to the recognized portions of the user's input communication.

16. (Currently amended) An automated dialog problem prediction system ~~that predicts problems in an automated dialog with a user based on the user's input communications in a task classification system,~~ comprising:

a task classification processor that determines whether a task classification decision can be made based on the user's input communication;

a dialog manager that outputs dialog to the user;

a dialog predictor that, if the task classification processor determines that a task classification decision cannot be made, determines whether a probability of conducting a successful dialog with the user exceeds a first threshold, a successful dialog being a dialog exchange between an automated dialog system and the user that results in ~~at least one of processing of the user's~~ an input communication of the user ~~and routing the user's input communication~~, wherein if the first threshold is exceeded, the dialog predictor prompts the dialog manager to conduct further dialog with the user ;
and

a dialog training database for storing dialog training data, wherein the dialog predictor determines the probability using the dialog training data stored in a dialog training database, the dialog training data including at least one of dialog classification models and extracted dialog features.

17. (Original) The system of claim 16, wherein if the first threshold is not exceeded, the dialog predictor prompts the dialog manager to route the user to a human for assistance.

18. (Original) The system of claim 16, wherein the dialog predictor determines whether a probability of conducting a successful dialog with the user exceeds a second threshold, the second threshold being greater than the first threshold, and if the second threshold is exceeded, the dialog predictor prompts the dialog manager to conduct further dialog with the user using a current dialog strategy.

19. (Original) The system of claim 18, wherein if the second threshold is not exceeded, the dialog predictor prompts the dialog manager to conduct further dialog with the user using an adapted dialog strategy.

20. (Original) The system of claim 19, wherein the adapted dialog strategy includes one of prompting the user with choices and prompting the user to confirm the recognition and understanding data.

21. (Currently amended) The system of claim 16, wherein the user's input communication includes at least of one verbal and nonverbal communications.

22. (Original) The system of claim 16, wherein the system is used for customer care purposes.

23. (Original) The system of claim 16, wherein the dialog predictor determines the probability using recognition data provided by a recognizer and understanding data provided by a language understanding unit, and the recognition and understanding data is derived from the user's input communication.

24. (Canceled)

25. (Currently amended) The system of claim 24 16, wherein the extracted dialog features are derived from recognition, understanding and dialog data.

26. (Currently amended) ~~The system of claim 16, further comprising:~~

An automated dialog problem prediction system, comprising:

a task classification processor that determines whether a task classification decision can be made based on the user's input communication;

a dialog manager that outputs dialog to the user;

a dialog predictor that, if the task classification processor determines that a task classification decision cannot be made, determines whether a probability of conducting a successful dialog with the user exceeds a first threshold, a successful dialog being a dialog exchange between an automated dialog system and the user that results in processing of an input communication of the user wherein if the first threshold is

exceeded, the dialog predictor prompts the dialog manager to conduct further dialog with the user ; and

a dialog history database that stores a first dialog exchange, wherein the first dialog exchange includes a first automated dialog output and a first ~~user's~~ input communication of the user, and the further dialog conducted with the user results in a second dialog exchange, the second dialog exchange including a second dialog output and a second ~~user's~~ input communication of the user, and the dialog predictor determining whether the probability of conducting a successful dialog with the user exceeds the first threshold using the first dialog exchange and the second dialog exchange.

27. (Canceled)

28. (Original) The system of claim 16, wherein if the task classification processor can make a task classification decision, the task classification processor classifies the task as one of a set of task objectives and routes the user's input communication in accordance with the classified task objected.

29. (Original) The system of claim 16, further comprising:

a recognizer that recognizes the user's input communication; and
a language understanding unit that applies a confidence function to the recognized portions of the user's input communication and provides an input to the task classification processor.

30. (Original) The system of claim 29, wherein the dialog predictor determines the probability using recognition data from the recognizer and understanding data from the language understanding unit derived from the user's input communication.

31. (Canceled)